

DEVICES COVERED IN THIS DOCUMENT:

4700S Panic Surface Vertical Rod Device 4700SF Fire Exit Surface Vertical Rod Device 4700L Panic Less Bottom Rod (LBR) Device



Rev 4, Rev Date: 05/31/2018

4700 Series Surface Vertical Rod Exit Device **Installation Instructions** Grade 1



I-ED00793



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FIGURE 1

THREADED END OF BOTTOM ROD

STEP 2: INSTALL BOTTOM ROD

STEP 1: INSTALL BOTTOM LATCH

BOTTOM LATCH

ASSEMBLY

ASSEMBLY

7. INSTALL BOTTOM LATCH AND ROD (Skip this step if installing LBR)

DOOR -

LATCH BRACKET

- STEP 1: Install bottom latch assembly to bottom latch bracket using provided screws and bottom two holes in bracket (see figure 1)
- STEP 2: Screw threaded end of bottom rod halfway onto bottom latch assembly.
- **STEP 3:** Before aligning the top end of the bottom rod with the actuating plate, lift up on the bottom rod until you feel the resistance from the bottom latch spring. At this point, stop pulling up (see figure 2).
- **STEP 4:** Continue holding rod up while aligning the top end of the bottom rod with the actuating plate. Align by rotating rod clockwise or counterclockwise until the holes line up (see detail A).
- STEP 5: Use the provided machine screw to attach rod to actuating plate. Be sure actuating plate on the chassis is in the down position (see detail A).
- The bottom latch assembly has a security feature. NOTE: This requires the bottom rod to be adjusted as described above. Be sure there is no slack in the bottom latch. To check for slack, grab the bottom rod and pull up. If it doesn't pull the latch bolt up immediately, there is too much slack. Disconnect the top of the bottom rod, screw bottom rod further onto bottom latch assembly. Reconnect top end and check again.

CHECK INSTALLATION by pushing on exit device push bar. Make sure bottom latch is retracted when push bar is depressed. Bottom latch should clear the finished floor, strike, or threshold. Bottom latch should have 3/8" throw.



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8. INSTALL TOP MOUNTING BRACKET Remove top latch cover and mounting bracket from top latch assembly. Fold and apply template to door using edge of door and face of top stop. Mark and drill holes as shown on CAUTION! End with holes (not slots) closest to strike template for both top latch bracket and strike. Be sure the vertical centerline for the top latch mounting holes is 1 7/16" 1 7/8" from the edge of door. Install top mounting bracket. (48 mm) - For metal doors, drill and tap for 1/4"-20 machine screws - For wood doors, pre-drill 1/8" holes For Sex Bolts, drill 5/16" clearance holes on exit device side (push _ side) and 3/8" on pull side 1 7/16" (37 mm) Screws: Metal doors or Sex Bolt: 1/4"-20 machine screws (2) Wood door: #12 wood screws (2) 9. INSTALL TOP LATCH AND STRIKE **STEP 1:** Install top strike to face of stop using only the two outer slotted mounting holes. **STEP 2:** Install top latch assembly to top OP LATCH ASSEMBLY mounting bracket using provided screws and top two holes in bracket. STEP 3: Close door, check alignment of strike and top latch, adjust if required, and install screw into center hole in strike. - INSTALL THIS SCREW LAST - For metal stop, drill and tap for #12-24 1 7/16" machine screws (37 mm) - For wood stop, pre-drill 1/8" holes FRAME SOFFIT DOOR 1 1/2" (38 mm) Strike Screws: Metal Stop: #12-24 button head machine screws (2) #12-24/#10 flat head combo machine/wood screw (1) Wood Stop: #10 button head wood screws (2) #12-24/#10 flat head combo machine/wood screw (1) 9/16" (15 mm) 1 3/16" (30 mm)

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10. INSTALL TOP ROD STEP 1: Thread top rod half-way onto top latch threaded connector. STEP 2: Use the provided machine screw to attach rod connector onto actuating plate, but do not attach top rod and rod connector yet. Align the edge of rod connector next to top rod and mark a cutting line on top rod. Be sure actuating plate on the chassis is in the down position. STEP 3: Remove top rod and cut top rod with hack saw or metal cutting saw blade. Deburr edges. TOP LATCH CONNECTOR STEP 4: Slide newly cut rod into drilling guide until it stops. Drilling guide sets the hole location so be sure rod is fully inserted. STEP 5: Lay the rod with the drilling guide flat on a table. Use one of the existing 1/8" guide holes on any side of the drilling guide and drill an 1/8'' hole through the rod. STEP 6: Install rod connector: Slide the rod connector into the newly drilled end of the rod and line up the hole in the rod connector with the hole that was just drilled into the rod. STEP 7: INSTALL TOP ROD. THREAD Use a hammer to tap the provided spring pin into the hole until ROD ONTO TOP LATCH CONNECTOR. FASTEN ROD CONNECTOR TO it is fully seated. Check that there is a secure connection ACTUATING PLATE. TOP ROD between the rod and rod connector. STEP 7: Be sure the top latch is in the locked position. Thread top rod half-ACTUATING PLATE way onto top latch threaded connector. Fasten bottom end of top rod onto actuating plate on exit device chassis. This may require raising or lowering the top rod by threading it clockwise or counterclockwise on the top latch threaded connector. NOTE: LATCH SHOULD BE IN LOCKED POSITION AS SHOWN TYPICAL TOP ROD LENGTH DOOR ROD HEIGHT LENGTH LOCKED UNLOCKED 6' 8" ROD CONNECTOR 31 1/47 7 35 1/4' 8 47 1/4 THIS CHART REPRESENTS THE TYPICAL LENGTH A OF THE TOP ROD WITHOUT THE ROD CONNECTOR **STEP 4:** FULLY INSERT ROD INTO STEP 1: THREAD TOP ROD ONTO Rod (Cut to proper length) TOP LATCH CONNECTOR DRILLING GUIDE STEP 2: INSTALL ROD CONNECTOR Drilling Guide AND USE EDGE TO MARK WHERE TO CUT TOP ROD 0 STEP 3: CUT TOP ROD WITH HACKSAW STEP 5: DRILL 1/8" THRU HOLE USING THE GUIDE HOLE AND DRILL ON A FLAT SECURE SURFACE ROD CONNECTOR Rod (Cut to CUTTING EDGE proper length) 1/8" Drill Bit Drill Guide Hole Drilling Guide Spring Pin STEP 6: DRIVE SPRING PIN INTO ROD / ROD CONNECTOR WITH A Rod HAMMER TO SECURE Completed Rod with Spring Pin Connection Rod Connector

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11. ADJUST AND TEST INSTALLATION

EXIT DEVICE OPERATION

When push bar is depressed and the door is opened, the top and bottom latch should be held retracted until door closes. When the push bar is released both latches remain in the retracted state. When the door closes and the top latch engages with the top strike, it releases the holding mechanism and allows the bottom latch to fully extend.

If the latches do not work smoothly when opening and closing the door, adjust the rod accordingly:

If the bottom latch does not clear the strike or threshold:

- Disconnect the bottom rod from the actuating plate and rotate the rod clockwise, which will raise the rod and latch bolt.
- If the top latch does not clear the strike:
 - Disconnect the top rod from the actuating plate and rotate the rod clockwise, which will shorten the overall distance. This will allow the top latch to completely rotate out of the way of the strike.

If the top latch will not stay in unlocked position after opening door:

- Check that the latch is not too far away from the strike. If so, add one of the included top strike shims to lower top strike.
- After adjusting the strike, readjust the top rod length to that the latch falls smoothly into the unlocked state.



14. DOGGING DEVICE

For increasing the life of this device, dog device during high traffic periods of the day. (A dogging device is not available on fire rated models).

Dogging:

Depress push bar, then insert dogging hex wrench and turn clockwise 90°. The push bar will remain depressed and the latch will stay retracted.

Release Dogging:

Hold push bar, then insert dogging hex wrench and turn counterclockwise 90°. The push bar will return to the up position and latch will extend to secure door.

